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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/072,567	02/08/2002	Naroun Soun	BSI-480US	1958
7590	11/02/2004		EXAMINER	
Christopher R. Lewis Ratner & Prestia Suite 301, One Westlakes, Berwyn P.O. Box 980 Valley Forge, PA 19482-0980			BUI, VY Q	
			ART UNIT	PAPER NUMBER
			3731	
DATE MAILED: 11/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/072,567

Applicant(s)

SOUN ET AL.

Examiner

Vy Q. Bui

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 30-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 14-19 and 21-29 is/are rejected.
- 7) ☒ Claim(s) 10-13 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/16/02; 8/22/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

Claims 30-39 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 08/02/2004.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1, 5, 13, 19, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated or, in the alternative, under 35 U.S.C. 103(a) as obvious over by YEE et al.-6,648,913.

Yee-'913 (Figs. 4a-4b; col. 4, lines 7-65) discloses braided modular stent 60 comprising 1<sup>st</sup> component stent 55 lining with graft 58 and having body 42 with an hourglass shaped interface 252/254 and 2<sup>nd</sup> stent component 256 lining with graft 58 comprising a leg 250 with hourglass-shaped interface 256 mating with interface 252/254. Interface 252/254 and 256 define a conical upper section of the hourglass shape as a seal region having at least a first diameter greater than a second diameter in the portion of the stent adjacent to the seal region and the seal region preventing an endo-leak between the stent 60 and a body lumen as recited in the claims. Alternatively, one can provide a reduced diameter section/interface area/conical seal region having a greater radial strength than that of a nominal section in a Yee-'931 stent so as the reduced diameter section/interface area/conical seal region can sustain more pressure existed in this region when two components are deployed in a branch blood vessel.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 6-9, 14-18, 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over YEE et al.-6,648,913.

As to claims 2-4 and 14-18, Yee-'913 discloses substantially all the limitations as recited in the claims except for the reduced diameter section of the hourglass-shaped interface has

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filaments braided in a greater braiding angle than that of the filaments in the nominal diameter sections/ filaments made to have a different set of metallurgy from the filaments in the nominal diameter sections/filaments of greater cross-sectional diameter than that of the filaments in the nominal diameter sections. However, it would have been obvious and quite within level of one of ordinary skill in the art at the time of the invention to make the reduced diameter section to have greater radial strength as recited in the claims for these measures are well known to make a section of a stent having a greater radial strength.

As to claims 6-8, Yee-'913 discloses substantially all the limitations as recited in the claims except for two leg stumps and a wound hexagonal-celled structure at one end of the 1<sup>st</sup> component. However, two leg stumps and a structure having wound hexagonal cells at one end of the 1<sup>st</sup> component for a blood flow is a well-known structure for a bifurcated stent and it would have been obvious and quite within level of one of ordinary skill in the art at the time of the invention to modify Yee bifurcated stent as recited in the claims so that blood flow can flow through the hexagonal cells.

As to claim 9, Yee-'913 discloses substantially all the limitations as recited in the claims except for one or more circumferential elevation(s) as recited in the claim. It is well known to make a cuff/band//ring/elevation around the outer surface of the stent so as to provide a seal means for preventing an endo-leak between the outer surface of the stent and a blood vessel and it would have been obvious and quite within level of one of ordinary skill in the art at the time of the invention to provide a cuff/band/ring/elevation around the outer surface of the Yee-'931 stent so as to provide a seal means for preventing an endo-leak between the outer surface of the stent and a blood vessel.

As to claim 23, Yee-'913 discloses substantially all the limitations as recited in the claims except for the sealing region having a spherical geometry. It would have been obvious for one

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of ordinary skill in the art at the time of the invention to provide a spherical geometry for the conical seal region of Yee-'931 as this configuration is only another design choice.

As to claims 24-25, Yee-'913 discloses substantially all the limitations as recited in the claims except for a sloped section having a radial strength different than that of the nominal diameter sections. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a sloped section having a radial strength different than that of the nominal diameter sections as this configuration is only another design choice.

As to claims 26-29, Yee-'913 discloses substantially all the limitations as recited in the claims except for a stent having a combination of the old features (such as: two leg stumps, two legs, sealing ring, hourglass interface, different angle of filaments braiding, different properties of metallurgical properties, different cross-sectional diameter of the braided filaments) as discussed above. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide Yee-'931 stent with the features as recited in the claims so as to provide these features to the Yee-'s stent.

### ***Allowable Subject Matter***

Claims 10-12 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

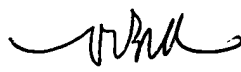
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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 571-272-4692. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T Nguyen can be reached on 703-308-2158. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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10/29/2014

Vy Q. Bui  
Primary Examiner  
Art Unit 3731